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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. MBHB00,883-K 900.023)

In the Application of
Beigelman et al.

)
) Examiner: TBA

Serial No.: TO BE ASSIGNED

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)
) Group Art Unit: TBA

Filed: FILED HEREWITH

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For: Novel Compositions for the Delivery of
Negatively Charged Molecules

)
)

Commissioner for Patents
Washington, D.C. 20231

36542 U.S. PTO
10/03/99
12/21/01

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. §1.56 and §§1.97-98, the applicants wish to make the following references of record in the above-identified application. This application is a continuation of US Serial No. 09/120,520 filed July 21, 1998 and is relied upon for an earlier filing date under 35 U.S.C. § 120. In accordance with Rule 37 CFR §1.98(d), all references cited were previously submitted to the Patent and Trademark Office with the prior application USSN 09/048,825 and accordingly no copies of documents are enclosed. All references cited are also listed in the PTO-1449 form enclosed herewith. It is requested that each document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is

requested even if the Examiner does not consider a cited document to be sufficiently pertinent to use in a rejection, or otherwise does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application.

Portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

CITED REFERENCES

U.S. PATENT DOCUMENTS

Document Number	Name
4,897,355	Epstein <i>et al.</i>
5,208,036	Epstein <i>et al.</i>
5,279,833	Rose
5,283,185	Epand <i>et al.</i>
5,334,761	Gebeyehu <i>et al.</i>
5,527,928	Nantz <i>et al.</i>
5,552,155	Bailey <i>et al.</i>
5,578,475	Hessee
5,676,954	Brigham
5,705,693	DePrince <i>et al.</i>
5,777,153	Lin <i>et al.</i>

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country
WO 91/18012	11/28/91	PCT
WO 91/18624	12/12/91	PCT
WO 91/18625	12/12/91	PCT
WO 92/00080	01/09/92	PCT

OTHER DOCUMENTS

Author, Title, Date, Pertinent Pages, etc.
Akhtar and Juliano, 1992, "Cellular Uptake and Intracellular Fate of AntiSense Oligonucleotides," <i>Trends Cell Biol.</i> 2:139-144
Bailey <i>et al.</i> , 1997, <i>Biochemistry</i> , 36, 1628
Bangham, 1965, <i>J. Mol. Biol.</i> 13, 238-252
Bennett <i>et al.</i> , "Cationic Lipids Enhance Cellular Uptake and Activity of Phosphorothioate Antisense Oligonucleotides," <i>Mol. Pharmacology</i> , 41:1023-1033 (1992)
Capaccioli <i>et al.</i> , 1993, <i>BBRC</i> , 197, 818-25
Cleary, <i>et al.</i> , 1986, <i>Cell</i> , 47:19-28.
Cotten <i>et al.</i> , 1990, "Transferrin-Polycation-Mediated Introduction of DNA into Human Leukemic Cells: Stimulation by Agents that Affect the Survival of Transfected DNA or Modulate Transferrin Receptor Levels," <i>Proc. Natl. Acad. Sci. USA</i> , 87:4033 (Abstract)
Felgner <i>et al.</i> , 1987, <i>PNAS</i> 84, 7413-7417
Felgner, 1990, <i>Advanced Drug Delivery Reviews</i> , 5, 162-187
Felgner, 1993, <i>J. Liposome Res.</i> , 3, 3-16
Kaye <i>et al.</i> , (1988), <i>Mol. Cell. Biol.</i> , 8(1):186-195
McGrath <i>et al.</i> , (1983), <i>Nature</i> , 304:501-506
Ramila <i>et al.</i> , 1993 <i>J. Biol. Chem.</i> , 268, 16087-16090
Sarver <i>et al.</i> , 1990, <i>Science</i> , 247:1222-1225
Semba <i>et al.</i> , 1985, <i>Proc. Natl. Acad. Sci. USA.</i> , 82:6497-6501
Stewart <i>et al.</i> , 1992, <i>Human Gene Therapy</i> , 3, 267-275
Wagner <i>et al.</i> , 1991, <i>Proc. Natl. Acad. Sci. USA</i> , 88, 4255
Wagner <i>et al.</i> , 1991, "Transferrin-Polycation-DNA Complexes: The Effect of Polycations on the

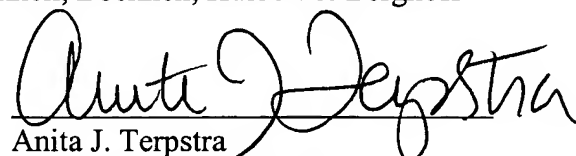
Structure of the Complex and DNA Delivery to Cells," <i>Proc. Natl. Acad. Sci. USA</i> , 88:4255 (Abstract)
Wu <i>et al.</i> , 1991, "Receptor-Mediated Gene Delivery <i>In Vivo</i> . Partial Correction of Genetic Analbuminemia in Nagase Rats," <i>J. Biol. Chem.</i> , 266:14338 (Abstract)
Xu <i>et al.</i> , 1996, <i>Biochemistry</i> 35, 5616
Zenke <i>et al.</i> , 1990, "Receptor-mediated Endocytosis of Transferrin-Polycation Conjugates: An Efficient Way to Introduce DNA into Hematopoietic Cells," <i>Proc. Natl. Acad. Sci. USA</i> , 87:3655 (Abstract)
International Search Report, PCT/US98/15129, mailed October 29, 1998

Respectfully submitted,

McDonnell, Boehnen, Hulbert & Berghoff

Date: December 21, 2001

By:


 Anita J. Terpstra
 Registration No. 47,132

FORM PTO-1449
(Rev. 2-32)

U.S. Department of Commerce
Patent and Trademark Office

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
--SUPPLEMENTAL--
(Use several sheets if necessary)

Atty. Docket No.

MBHB00,883-K
900.023

Serial No.

TBA

Applicant:

Beigelman et al.

Filing Date:

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Group:

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U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	*	4,897,355		Epstein <i>et al.</i>			
	*	5,208,036		Epstein <i>et al.</i>			
	*	5,279,833		Rose			
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							YES	NO
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	*	Cleary, <i>et al.</i> , 1986, <i>Cell</i> , 47:19-28.
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	*	McGrath <i>et al.</i> , (1983), <i>Nature</i> , 304:501-506
	*	Ramila <i>et al.</i> , 1993 <i>J. Biol. Chem.</i> , 268, 16087-16090
	*	Sarver <i>et al.</i> , 1990, <i>Science</i> , 247:1222-1225
	*	Semba <i>et al.</i> , 1985, <i>Proc. Natl. Acad. Sci. USA</i> , 82:6497-6501
	*	Stewart <i>et al.</i> , 1992, <i>Human Gene Therapy</i> , 3, 267-275
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	*	Zenke <i>et al.</i> , 1990, "Receptor-mediated Endocytosis of Transferrin-Polycation Conjugates: An Efficient Way to Introduce DNA into Hematopoietic Cells," <i>Proc. Natl. Acad. Sci. USA</i> , 87:3655 (Abstract)
	*	International Search Report, PCT/US98/15129, mailed October 29, 1998
EXAMINER		DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.